

SO HOW DO OUR NERVOUS SYSTEMS CONNECT?

Not like this.



More like this.

The Window of Tolerance

Hyper-arousal

Hyper-arousal-Mobilized

Sympathetic Mode: Fight or Flight



Fear Worry Irritation Impulsive Heart racing Increased stress hormones

Panic

Sense of Threat

Stressor/Threat



Window of Tolerance Social Engagement

Parasympathetic Mode: Ventral Vagal



Engaged
Sense of safety
Curiosity
Energetic
Connected and
Centered
Grounded

Aggression/irritability

Sense of Safety

Stressor/Threat

Hypo-arousal—Immobilized

Parasympathetic Mode: Dorsal Vagal



Numb
Disconnected
Foggy
Shut down
Low energy
Fatigue
Dissociation

Collapse/Helpless

A Map of ANS States

- ANS State Determines
 How We Feel
- 3 Basic States: Let's Get a Sense of Them
- What happens to you when you're in each state?
- Practices help return us to Window of Tolerance/Presence

Hypo-arousal

Neurodivergent

How Trauma Impacts the Nervous System

Dysregulates the ANS

Stuck in
hyperactivation
(anxiety, trauma
triggers, autobio and
somatic memories)

Then collapse into hypoarousal states (depressive state, dissociation, numbness)

Substances used to try to recalibrate

Hopeless beliefs grow in the rollercoaster of dysregulation



The Squeezie Vest Practice

- Quick First Aid for Acute Need
- Good for Hyperarousal in particular
- Holds firmly to Contain
- We hold ourselves like a Caregiver holding a young person

Squeezie Vest Continued

What did you feel?

When might this practice be helpful?



Progressive Muscle Relaxation

Needs 5 to 10 min

Seated or Lying Position

Squeeze and Release, Body
part and Breathe together

Heart-Focused Breathing

Creating coherence or entrainment between brain and heart

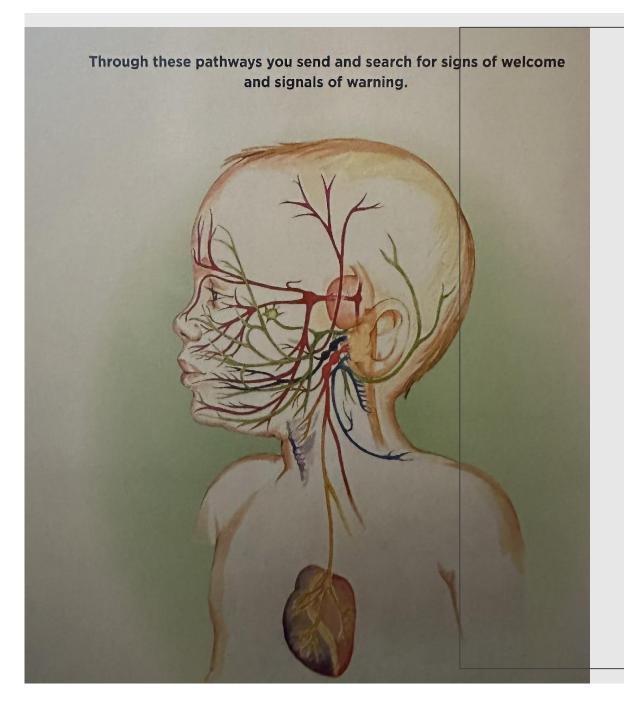
HeartMath

https://www.heartmath.org/heart-coherence/

Heart-Focused Breathing

What did you feel?

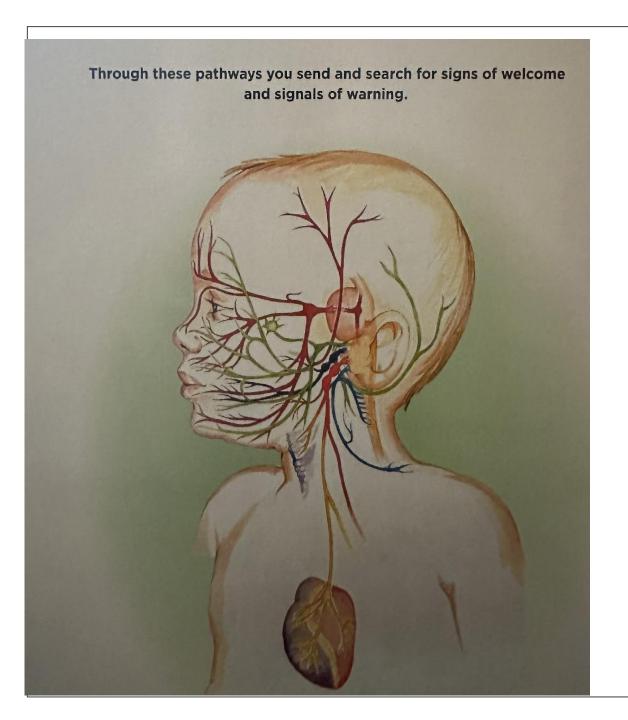
When might this practice be helpful?



The Social Nervous System: Coregulation

- Ears for Listening
- Eyes for Seeing the Other
- Nose for Sniffing
- Mouth for talking, singing, laughing, sucking
- Larynx and Pharynx for Vocalizing
- Heart for Connecting, Immersing, Loving, Attaching
- •We are wired to protect, support, bond, and get through danger with each other.
- The SNS can return one to Window of Presence, it is the Balancer when too hyper or hypo

•Image from Deb Dana Flipbook

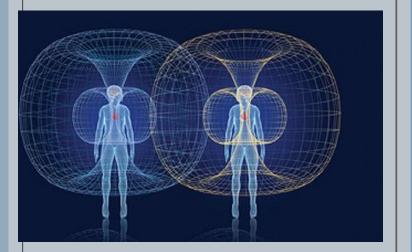


Social Nervous System Grounding

We travel to:

- Ears (tragus)
- Eyebrows
- Cheeks
- Mandibles
- Jaw/Picture the creature delighted by your presence
- Back to Earlobes
- Vagus/Neck
- Heart

Expanding: The Collective Nervous System



Coregulation Practices: Pauses, Eyes and Contact

- Pauses
- Brief and frequent eye contact (increases group coherence)
- Heart-Focus
- Simple Side Contact (2 people) to help support through entraining NS's and pressure/containment
- Spine to Spine
- Group contact



How Can We Use These Practices?

- Help ourselves before and during risk/actions
- Come out of collapse and freeze responses to current conditions/oppressions
- Solidarity Building
 - Help our organizing groups be more emotionally welcoming, work better
 - Develop trust to process traumatic experiences together
 - Helping our groups stay together to grow stronger and deeper together

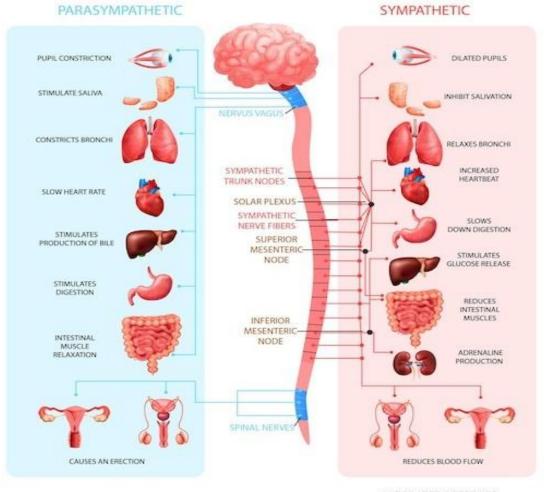
ADDITIONAL BACKGROUND

Nervous system Brain Spinal cord Nerve cell Central nervous system Peripheral nervous system

Diving in: The Autonomic Nervous System (ANS)

- Manages our wired in survival responses/stress responses. Are we safe?
- Manages our biological need for connection and closeness with others. Are we welcome?
- Starts in the brain, has 2 Branches:
 - Sympathetic (gas) and Parasympathetic (brake)
 branches work fluidly together
- Nerve branches go all over body, face, <u>heart</u>, stomach, organs, muscles

PERIPHERAL AUTONOMIC NERVOUS SYSTEM



MAINTAINS HOMEOSTASIS

MOBILIZES RESERVES UNDER STRESS

POLYVAGAL CHART

The nervous system with a neuroception of threat:

FREEZE

Collapse • Immobility Conservation of Energy

DORSAL VAGAL

(LIFE THREAT)

Dissociation Numbness

Depression

Raised pain threshold

Helplessness

"I CAN'T"

Shame

Shut-Down

Hopelessness

Preparation for death

Trapped

"I CAN"

AROUSAL INCREASES

/ FLIGHT

movement towards

Rage / Panic

Anger / Fear

Irritation / Anxiety

Frustration / Worry & Concern

movement away

SYMPATHETIC

(DANGER)

The nervous system with a neuroception of safety:

Calmness in connection

Settled

Groundedness

SOCIAL ENGAGEMENT

Connection • Safety
Oriented to the Environment

VENTRAL VAGAL

Curiosity/Openness

Compassionate

Mindful / in the present

VVC is the beginning and end of stress response.

When VVC is dominant, SNS and DVC are in transient blends which promote healthy physiological functioning.

© 2017 Ruby Jo Walker, All rights reserved

Adapted by Ruby Jo Walker from: Cheryl Sanders, Anthony "Twig" Wheeler, and Steven Porges.

PARASYMPATHETIC NERVOUS SYSTEM

DORSAL VAGAL COMPLEX

Increases

Fuel storage & insulin activity • Immobilization behavior (with fear)
Endorphins that help numb and raise the pain threshold
Conservation of metabolic resources

Decreases

Heart Rate • Blood Pressure • Temperature • Muscle Tone Facial Expressions & Eye Contact • Depth of Breath • Social Behavior Attunement to Human Voice • Sexual Responses • Immune Response

SYMPATHETIC NERVOUS SYSTEM

Increases

Blood Pressure • Heart Rate • Fuel Availability • Adrenaline Oxygen Circluation to Vital Organs • Blood Clotting • Pupil Size Dilation of Bronchi • Defensive Responses

Decreases

Fuel Storage • Insulin Activity • Digestion • Salivation Relational Ability • Immune Response

PARASYMPATHETIC NERVOUS SYSTEM

VENTRAL VAGAL COMPLEX

Increases

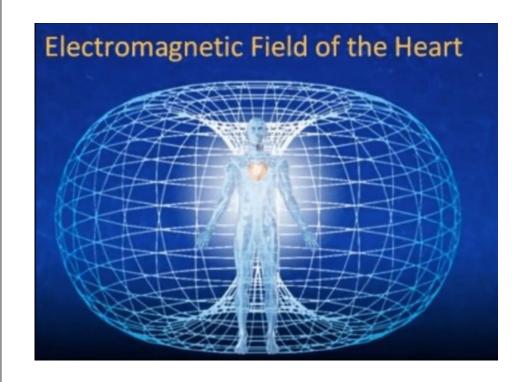
Digestion - Intestinal Motility - Resistance to Infection
Immune Response - Rest and Recuperation - Health & Vitality
Groulation to non-vital organs (skin, extremities)
Oxytocin (neuromodulator involved in social bonds that allows immobility
without fear) - Ability to Relate and Connect
Movement in eyes and head turning - Prosody in voice - Breath

Decreases

Defensive Responses

.....

rubyjawalker.com



A Little Deeper: Heart-Brain

Coherence
• The heart communicates with the brain and body in four ways: Nerves, chemicals, pulse

waves, electromagnetic fields

•Fields are measurable by machines

Heart's field is the most powerful

•Heart and brain constantly communicating,

Brain can entrain to heart-it synchs to its waves

Creates internal coherence

ohttps://www.heartmath.org/research/

Head, Heart, Gut Holding Another Practice



3 Brains of Head, Heart, Gut all Perceive and Hold



Practice "seeing" a friend with each, starting with head



Travel top down then bottom up

